

**In the claims:**

Please cancel claims 5-10, 12 and 17-20.

Please add claims 26-40 as follows:

26. (New) A transgenic mouse whose genome comprises a disruption in a target gene, wherein the target gene is capable of homologous recombination with a nucleotide sequence homologous to SEQ ID NO:1, and wherein the transgenic mouse exhibits increased prepulse inhibition.
27. (New) The transgenic mouse of claim 26, wherein the disruption is produced by homologous recombination using a targeting construct comprising SEQ ID NO:2 or SEQ ID NO:3.
28. (New) The transgenic mouse of claim 26, wherein the disruption is homozygous.
29. (New) The transgenic mouse of claim 26, wherein the disruption is heterozygous.
30. (New) A cell or tissue isolated from the transgenic mouse of claim 26.
31. (New) A transgenic mouse comprising a heterozygous disruption in a target gene, wherein the target gene is capable of homologous recombination with a nucleotide sequence homologous to SEQ ID NO:1, wherein, upon breeding, said transgenic mouse produces a transgenic mouse comprising a homozygous disruption in the target gene exhibiting increased prepulse inhibition.
32. (New) The transgenic mouse of claim 31, wherein the disruption is produced by homologous recombination using a targeting construct comprising SEQ ID NO:2 or SEQ ID NO:3.
33. (New) A cell or tissue isolated from the transgenic mouse of claim 31.
34. (New) A method of producing a transgenic mouse comprising a disruption in a target gene, the method comprising:
- (a) providing a mouse embryonic stem cell comprising a disruption in the target gene, wherein the target gene is capable of homologous recombination with a nucleotide sequence homologous to SEQ ID NO:1;
  - (b) introducing the mouse embryonic stem cell into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and
  - (c) breeding the chimeric mouse to produce the transgenic mouse;
- wherein the transgenic mouse comprising a disruption in the target gene exhibits increased prepulse inhibition.

35. (New) The method of producing a transgenic mouse recited in claim 34, wherein the disruption is produced by homologous recombination using a targeting construct comprising SEQ ID NO:2 or SEQ ID NO:3.
36. (New) A cell or tissue isolated from the transgenic mouse produced by the method of claim 34.
37. (New) A method of identifying an agent that modulates prepulse inhibition, the method comprising:
- (a) providing a transgenic mouse comprising a disruption in a target gene, wherein the target gene is capable of homologous recombination with a nucleotide sequence homologous to SEQ ID NO:1, wherein the transgenic mouse exhibits increased prepulse inhibition;
  - (b) administering an agent to the transgenic mouse; and
  - (c) determining whether prepulse inhibition is modulated in the transgenic mouse.
38. (New) The method of identifying an agent that modulates prepulse inhibition recited in claim 37, wherein the disruption is produced by homologous recombination using a targeting construct comprising SEQ ID NO:2 or SEQ ID NO:3.
39. (New) A method of identifying an agent that ameliorates a phenotype associated with a disruption in a target gene, the method comprising:
- (a) administering an agent to a transgenic mouse comprising a disruption in the target gene, wherein the target gene is capable of homologous recombination with a nucleotide sequence homologous to SEQ ID NO:1, wherein the transgenic mouse exhibits increased prepulse inhibition; and
  - (b) determining whether the agent ameliorates the increased prepulse inhibition.
- 40 (New) The method of identifying an agent that ameliorates a phenotype recited in claim 39, wherein the disruption is produced by homologous recombination using a targeting construct comprising SEQ ID NO:2 or SEQ ID NO:3.

## **REMARKS**

### **I. Amendments**

#### ***A. Specification***

The amendment to the specification was made in order to claim the benefit of an earlier application whose application serial number was not available to the Applicant at the time of